

## Loudoun County, Virginia

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Office of the County Administrator 1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000 Telephone (703) 777-0200 • Fax (703) 777-0325

At a business meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Government Center, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Tuesday, December 15, 2009 at 9:00 a.m.

IN RE:

INTENT TO AMEND CHAPTER 1066 OF THE CODIFIED ORDINANCES
OF LOUDOUN COUNTY, STRUCTURAL SOUNDNESS AND WATER
TIGHTNESS OF SEPTIC TANKS

Mr. York moved that the Board of Supervisors amend Chapter 1066 of the Codified Ordinances of Loudoun County as seen in the Attachment.

Seconded by Mr. Burton.

Voting on the Motion: Supervisors Buckley, Burk, Burton, Kurtz, McGimsey, Miller, Waters and York – Yes; Supervisor Delgaudio – No.

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DEPUTY CLERK FOR THE LOUDOUN COUNTY BOARD OF SUPERVISORS

(5 -INTENT TO AMEND CHAPTER 1066 OF THE CODIFIED ORDINANCES OF LOUDOUN COUNTY, STRUCTURAL SOUNDNESS AND WATER TIGHTNESS OF SEPTIC TANKS)

## PROPOSED AMMENDMENT TO THE CODIFIED ORDINANCES OF LOUDOUN COUNTY CHAPTER 1066

## SEPTIC TANKS, HOLDING TANKS, PUMP TANKS, TREATMENT UNITS AND TANKS FOR OTHER ONSITE WASTEWATER USES

- (a) <u>Depth</u> The maximum cover over a tank containing wastewater shall not exceed 48". (Effective as of April 1, 2010.)
- (b) <u>Location</u> Tanks shall not be placed in low areas or swales subject to drainage, channeling of rainfall, or ponding of water. Tanks shall be protected with controlled backfill when shrink-swell soil is present. If water table indications are observed or measured above penetrations or tank seams, a water table reduction system must be installed to lower the water table below the seam or penetration. (Effective as of April 1, 2010.)
- (c) Structural Soundness Tanks shall be structurally sound as determined by an engineer design with appropriate safety factors, and watertight verified through appropriate testing and compliance monitored by the Loudoun County Health Department. All tanks shall be designed and certified by a Professional Engineer, licensed and qualified to perform structural design in the State of Virginia. The engineer shall contemplate all reasonably expected loading conditions, including burial depth, tank full to top of riser, an empty tank installed with water table at top of ground, vehicular traffic and any other reasonable expected loading conditions. The manufacturer shall certify that all tanks manufactured meet the engineer design. Tanks may only be installed in accordance with the design standards specified. (Effective as of April 1, 2010.)
- (d) <u>Penetrations</u> All tank lids shall be manufactured with risers pre-cast into the top of the tank. Risers shall terminate a maximum of 6 inches below finished grade. Manufacturers shall install watertight boots at all penetrations. Boots for all tanks must meet ASTM C-923. Boots for concrete tanks must meet ASTM C-923 and have a clamp assembly to resist pipe deformation. (Effective as of April 1, 2010.)
- (e) <u>Tank Testing</u> All tanks shall be watertight, including inlet and outlet pipe penetrations, and the riser assembly. The installer shall, on all watertight tanks, complete one of the following tests during, or in conjunction with a Loudoun County Health Department or other approved construction inspection. In high water table conditions the Health Director is authorized to require a water tightness test of the entire treatment and conveyance system. (Effective as of April 1, 2010.)
  - (1) Water Test Procedure: A water test is to be performed by installing the tank, connecting inlet and outlet piping (with caps), installing risers as necessary, and filling with water two inches above the tank into the riser for 24 hours. The tank penetrations must be visible. The water level is to be marked in the riser. The tank is to be refilled to the mark and observed for one hour. If the level has not dropped the tank passes. (Effective as of April 1, 2010.)
  - (2) <u>Vacuum Test Procedure</u>: A vacuum test is performed by plugging inlet and outlet piping, installing risers, and using a vacuum pump to pull a negative pressure of 4 inches of mercury. The tank must hold this vacuum for 5 minutes with no more than a 10% variation in pressure. (Effective as of April 1, 2010.)

If tanks fail either test, repairs must be completed and the test repeated until satisfactory. (Effective as of April 1, 2010.)

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